UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/595,815	05/25/2007	Gunter Kindel	51534	7147	
ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P. 1300 19TH STREET, N.W.			EXAMINER		
			SIMMONS, CHRIS E		
SUITE 600 WASHINGTON,, DC 20036			ART UNIT	PAPER NUMBER	
			1612		
			MAIL DATE	DELIVERY MODE	
			07/06/2011	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.		Applicant(s)
	10/595,815		KINDEL ET AL.
Office Action Summary	Examiner		Art Unit
	CHRIS SIMMON	ıs	1612
The MAILING DATE of this communication app Period for Reply	ears on the cove	r sheet with the co	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period verailure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS CO 36(a). In no event, how vill apply and will expire , cause the application t	OMMUNICATION ever, may a reply be time SIX (6) MONTHS from to become ABANDONED	<b>l.</b> lely filed  the mailing date of this communication.  (35 U.S.C. § 133).
Status			
1) ☐ Responsive to communication(s) filed on 12 M 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-fin	rmal matters, pro	
Disposition of Claims			
<ul> <li>4)  Claim(s) 1-17 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-3 is/are rejected.</li> <li>7)  Claim(s) 4-17 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>	wn from consider		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b)  ob drawing(s) be held ion is required if th	I in abeyance. See le drawing(s) is obj	e37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority documents  * See the attached detailed Office action for a list	s have been reces have been recentity documents have 17.2	eived. eived in Application ave been receive 2(a)).	on No ed in this National Stage
Attachment(s)			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>5/12/2006</u>.</li> </ol>	4)	Interview Summary ( Paper No(s)/Mail Da Notice of Informal Pa Other:	ite

Art Unit: 1612

### **DETAILED ACTION**

## Claim Objections

Claims 4-17 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-17 have not been further treated on the merits.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,688,491 ("Shahidi") in view of US 5,628,986 ("Sanker"), Heath, Henry B. Source Book of Flavors. NY: Van Nostrand Reinhold, 1981. – "Heath"), m-dimethoxybenzene (Food and Chemical Toxicology, Volume 38, Supplement 3, 2000, Pages s59-s62 – "Food and Chemical Toxicology"), and MedicineNet.com (Taste and Smell.

http://www.medicinenet.com/script/main/art.asp?articlekey=212; 10/24/2002) as evidenced by The Good Scents Company: "Salicylaldehyde"

(http://web.archive.org/web/20030719115435/http://www.thegoodscentscompany.com/d ata/rw1028641.html) and US 5,795,616 ("Greenberg").

Shahidi discloses the compositions having incorporated a flavoring agent or a mixture of flavoring agents. Such flavoring agents are well known in the art. Those flavoring agents most suitable for use in the present invention include: anise, cassia, clove, dihydroanethole, estragole, eucalyptol, menthol, methyl salicylicate, peppermint, oxanone, phenyl ethyl alcohol, sweet birch, eugenol, spearmint, cinnamic aldehyde, menthone, alpha-ionone, ethyl vanillin, limonene, isoamylacetate, benzaldehyde, thymol, ethylbutyrate and many others. These additional, or further optional, flavoring agents comprise from about 0.01% to about 5.0%, preferably from about 0.05% to about 2.0% and most preferably from about 0.1% to about 1.0% of the composition.

Shahidi does not expressly teach a mixture comprising A) dihydroanethole, B) o-anisaldehyde, C) 1,3-dimethoxybenzene and D) 2'-hydroxyacetophenone.

Sanker discloses dihydroanethole as a suitable flavoring agent. *See claim 4.*Heath discloses o-anisaldehyde (*page 372*) and 2-hydroxyacetophenone (i.e., o-acetylphenol or 2'-hydroxyacetophenone) (*see page 364*) are known flavoring agent.

Food and Chemical Toxicology discloses m-dimethoxybenzene (i.e., 1,3-dimethoxybenzene) is a flavor ingredient. See page 61 under 'Status' section.

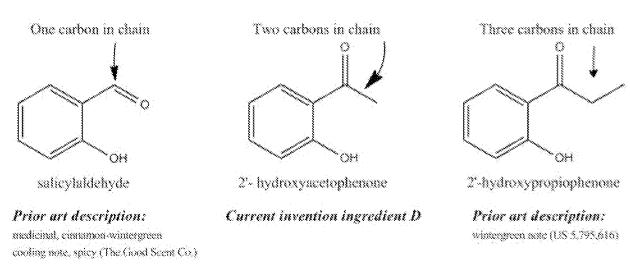
MedicineNet.com discloses both taste and smell are sensations that result when specialized nerve receptors in the mouth and nose detect molecules through chemoreception. The flavor in a food is due to a combination of taste and smell. See MedicineNet.com.

It would have been reasonable to consider the description of the odor of a compound to match the taste description of a compound since flavor depends on smell. Because the Good Scent Company discloses that the odor of salicylaldehyde is described as cinnamon-wintergreen, it would be reasonable to consider the taste as cinnamon-wintergreen as well.

It would have been prima facie obvious to have added A) dihydroanethole, B) o-anisaldehyde, C) 1,3-dimethoxybenzene and D) 2'-hydroxyacetophenone as the flavors of to the composition described by Shahidi because each one is known individually in the prior art as suitable flavor agents. Additionally, one of ordinary skill in the art would have had a reasonable expectation of providing flavor to the Shahidi composition by adding known flavor agents to it. The composition as combined would naturally contain

Art Unit: 1612

a wintergreen odor or flavor due to the presence of 2'-hydroxyacetophenone because 2'-hydroxyacetophenone is similar to 2 compounds – only differing by the length of a carbon chain – already known to have wintergreen flavor (2'-hydroxypriopiophenone) or odor (salicylaldehyde). The Good Scent Company discloses the odor of salicylaldehyde is described as, inter alia, cinnamon-wintergreen. Greenberg discloses 2'-hydroxypriopiophenone can be used to impart a wintergreen flavor to compositions. See abstract; column 2, lines 47-49. These 2 previously reported compounds differ from each other by the length of the carbon chain, i.e., from 1 carbon to 3 carbons; however, this difference did not alter the wintergreen odor/flavor possessed by each one. 2'-hydroxyacetophenone differs from the previously reported compounds in that it contains 2 carbons instead of 1 or 3 carbons:



Due to the similarity in the structure of the 2'-hydroxyacetophenone currently claimed to the structures of salicylaldehyde and 2'-hydroxypropiophenone and the fact that altering the carbon chain length from 1 carbon to 3 carbons did not alter the

Art Unit: 1612

wintergreen note of salicylaldehyde and 2'-hydroxypropiophenone, 2'-hydroxyacetophenone would likely also have a wintergreen flavor or odor.

With regard to claim 3, the ratio of compounds A): B): C): D): E) in parts by weight of about 5-80: 10-90: 100-500: 100-500: 0-200 are *prima facie* obvious because the '491 patent discloses concentration ranges for the flavor agent (0.01% to about 5.0%) that overlap the weight ratios claimed. For example, 0.8%, 0.9%, 5%, 5%, and 0% of A), B), C), D) and E), respectively, reads on a ratio of 80:90:500:500:0 for A): B): C): D): E).

#### Conclusion

No claims are allowed.

#### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS SIMMONS whose telephone number is (571)272-9065. The examiner can normally be reached on Monday - Friday from 7:30 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/595,815

Art Unit: 1612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Page 7

/C. S./ Examiner, Art Unit 1612

/Patricia A Duffy/

Primary Examiner, Art Unit 1645